

# Notice of Allowability

Application No.

09/467,611

Examiner

Jason M. Perilla

Applicant(s)

MIAO ET AL.

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed April 16, 2007.
2. ☒ The allowed claim(s) is/are claims 1, 4-18, and 20-30 renumbered respectively as claims 1-27.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date 20070515.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### EXAMINER'S AMENDMENT

1. Claims 1, 4-18, and 20-30 are pending in the instant application.
2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Timothy Trop on May 14, 2007.

The application has been amended as follows wherein the following versions of claims 1, 9-11, 13, 16, 17, 20-23, 26 and 28 replace all prior versions in their entirety:

1 A cellular transceiver comprising:  
a first digital decimation filter to pass N bands; and  
a second digital decimation filter to reject all but one of said N bands  
coupled to said first digital decimation filter, wherein said first and second digital  
decimation filters are programmable tap filters and said first digital decimation filter may  
to selectively implement a digital square-root-raised-cosine filter for a Wideband Code  
Division Multiple Access mode or a digital filter for a Global System for Mobile  
Communication mode.

9. The transceiver of claim 1 wherein said first and second digital  
decimation filters each have filter coefficients ~~including a memory that provides less than~~  
~~all coefficients from said first filter to said second filter.~~

10. The transceiver of claim 9 ~~wherein said~~ including a memory that provides  
less than all of the coefficients from said first digital decimation filter to said second digital  
decimation filter.

11. The transceiver of claim 1 wherein the output from said first digital decimation filter and the output from said second digital decimation filter are coupled to a multiplexer, the output of said multiplexer being selectively controllable depending on the nature of ~~the cellular system~~ a received signal.

13. The transceiver of claim 12 including a controller that ~~selectively programs said first digital decimation filter to provide an output for a Wideband Code Division Multiple Access mode wherein said controller~~ selects the output of the first digital decimation filter when the transceiver is located in a Wideband Code Division Multiple Access system and selects the output of the second digital decimation filter when the transceiver is in a Global System for Mobile communication system.

16. A method of receiving cellular signals comprising:  
providing a first filtering stage and a second filtering stage;  
detecting ~~the~~ a type of signal that has been received;  
selectively programming said first stage to filter a Wideband Code Division Multiple Access signal or a Global System for Mobile communication signal;  
providing using said second stage to filter the Global System for Mobile communication signal; and  
selectively using said first and second stages based on the type of signal ~~the detected signal~~.

17. The method of claim 16 including selectively setting ~~the~~ a number of taps in said first filter stage to provide a square-root-raised-cosine filter for a Wideband Code Division Multiple Access mode.

20. The method of claim 16 including selectively filtering said input signal depending on whether the input signal is a Global System for Mobile communications ~~mode~~ signal or a Wideband Code Division Multiple Access ~~mode~~ signal.

21. The method of claim 16 wherein said first and second filtering stages each have filter coefficients and including providing less than all of the coefficients from said first stage to said second stage.

22. The method of claim 16 including using an anti-alias analog filter and an analog-to-digital converter ~~that is the same~~ for both the Wideband Code Division Multiple Access and Global System for Mobile communication modes.

23. The method of claim 17 including setting a the number of taps depending on the type of signal received.

26. A computer-readable medium storing computer program instructions that, when executed on a computer, cause a processor-based system to:  
selectively set a number of taps in a first filtering stage depending on whether a Wideband Code Division Multiple Access signal or a Global System for Mobile communication signal has been detected; and  
select an output from either the first filtering stage of two filtering stages or from a second filtering stage of the two filtering stages depending on whether a Wideband Code Division Multiple Access or a Global System for Mobile communication signal is received.

28. The medium of claim 26 wherein the first and second filtering stages each have filter coefficients and further storing instructions that cause the processor-based system to provide less than all coefficients from said first stage to said second stage when a Global System for Mobile communication signal is being received.

**Claims 1, 4-18, and 20-30 are renumbered respectively as claims 1-27, and the claim dependency is renumbered accordingly.**

***Allowable Subject Matter***

3. Claims 1, 4-18, and 20-30 renumbered respectively as claims 1-27 are allowed.

***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Perilla whose telephone number is (571) 272-3055. The examiner can normally be reached on M-F 8-5 EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh M. Fan can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jason M. Perilla  
May 15, 2007

jmp



CHIEH M. FAN  
SUPERVISORY PATENT EXAMINER